**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION IX**
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**San Francisco, CA 94105**

**SENT VIA EMAIL AS PDF**

November 12, 2020

Sean-Ryan McCray
Remedial Project Manager
Department of the Navy
Base Realignment and Closure Program Management Office West
33000 Nixie Way, Building 50
San Diego, CA 92147

Subject: EPA Comments on the Draft Radiological Scoping Survey Report, Parcel F Structures—Finger Piers
Hunters Point Naval Shipyard Superfund Site

Dear Mr. McCray:

Please see attached EPA comments on the "Draft Radiological Scoping Survey Report, Parcel F Structures— Finger Piers" for the Hunters Point Naval Shipyard Superfund Site in San Francisco, California. The draft report is dated August 2020.

Please contact me at 415-972-3181 or praskins.wayne@epa.gov with any questions.

Sincerely,

Wayne Praskins
EPA Project Manager

cc: Nina Bacey, California Department of Toxic Substances Control
Terry Han, California Department of Public Health, EMB
Tina Low, San Francisco Regional Water Quality Control Board
Amy Brownell, San Francisco Department of Public Health

**EPA Comments on the Draft Radiological Scoping Survey Report,**
**Parcel F Structures—Finger Piers**
**Hunters Point Naval Shipyard Superfund Site**
**Draft Report dated August 2020; EPA Comments dated November 12, 2020**

1. **Section 2.1, Site Location:** The Draft Radiological Scoping Survey Report Parcel F Structures – Finger Piers, Hunter's Point Naval Shipyard, August 2020 (the Report) states that "The finger piers … include concrete surfaces and other infrastructure (e.g., open and closed manholes, metal grates, one small structure on the finger piers [not included in this scoping survey], other debris)." Please describe the small structure not included in the survey and explain why it was not included.

2. **Section 3.4.5, Alpha/Beta Static Measurements, Page 3-8:** The last sentence in the third paragraph on page 3-8 states that the minimum detectable concentrations (MDCs) "for the "floor monitor" detector listed in the Work Plan (APTIM, 2019) were 21.5 dpm [disintegrations per minute]/100 $cm^2$ [square centimeters] for alpha activity and 184 dpm/100 $cm^2$ for beta activity." Please revise the Report to state the matrix/matrices to which the referenced alpha and beta MDCs apply.

3. **Section 5.2.3, Site Preparation of Survey Areas, Page 5-3:** This section states that the surfaces of the finger piers were swept to remove dust and obtain a debris-free smooth surface to facilitate alpha/beta surveys. Please revise this section to describe how the surfaces were swept, how much or what type of debris was swept away, and whether removed dust and debris were surveyed to check for radiological contamination prior to disposal.

4. **Section 5.3.1, Reference Background Areas, Page 5-3**: It is unclear which reference background area or areas were used. The text in Section 5.3.1 states, "A concrete pad in Parcel C was used as the RBA [reference background area] for alpha/beta measurements," but Field Change Request (FCR) 04 states that "data collected to date have shown that this reference area [Parcel C] is not appropriate for the Finger Piers." The FCR recommends use of a portion of the Finger Pier after scarification.

   In addition, Section 5.3.1 states that "a small concrete pad adjacent to the submarine pens was used as the RBA for gamma measurements." In contrast, Section 5.3.2 (Survey Investigation Levels) of the APTIM May 2019 Work Plan states, "The reference area behind Building 810 (Figure 1) will be used to establish gamma instrument-specific investigation levels (ILs)." Please revise the Report to clarify which RBAs were used, and whether changes to the workplan were fully documented with FCRs.

5. **Section 5.3.3.1, Alpha/Beta Scan Surveys, Page 5-7:** The second paragraph states that "standing water was observed in the manholes at low tide but that did not limit accessible surfaces." Given that the presence of water will alter the geometry and detection sensitivity of radiological measurements, please revise the text to state whether the surfaces that were surveyed were wet at the time the alpha/beta assays were completed. If the surfaces were wet, please explain how the results of the radiological surveys still met the project MDCs

and provided representative results.

6. **Section 6.4, Alpha/Beta Scan Measurement Results Data Quality Review, Page 6-4:** . This section states that Section 5.5.2.4 from the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) guidance was used to determine that collecting three times as many measurements (54) as originally designed (18) would account for the alpha scan MDC being approximately three times the required MDC of 100 dpm/100 $cm^2$. Please revise this section to include the formulas and parameters for these calculations or text describing in detail how MARSSIM guidance was applied to make this sample size determination.

7. **Section 7.2, Conclusions, Page 7-3 and Section 7.3, Recommendations, Page 7-4:** The text states that "Therefore, the survey results do not conclude that exceedances are the result of historical Navy operations." We interpret this statement to mean that the exceedances may or may not be the result of historical Navy operations (i.e., the Navy has not concluded that exceedances are not the result of historical Navy operations).

8. **Table 10, Alpha Beta Static Smear Summary Statistics, and Table 11, Alpha Beta Biased Smear Summary Statistics:** Footnote a to Tables 10 and 11 lists the release limits for alpha activity and beta activity of 100 dpm/100 $cm^2$ and 1000 dpm/100 $cm^2$. These are higher than the ILs for removable activity of 20 dpm/100 $cm^2$ and 200 dpm/100 $cm^2$. Please clarify, making any needed corrections to footnote a in Tables 10 and 11 and verifying that no smear results exceed the release criteria. .

9. **Appendix F, Gamma Survey Data:** The first data table in the appendix does not include the date(s)/times for the gamma walkover survey data for Survey Unit (SU) 4. As a result, it is not possible to confirm if the data were collected on the dates stated in the Report. In addition, we could not locate the gamma walkover survey data for SU 5 or SU 6. Please revise the Report to include any missing gamma walkover survey data, including raw instrument data showing the dates and times data were collected.

10. **Appendix G, Alpha Beta Survey Data:** The alpha/beta scan and static data provided in the appendix do not appear to be the raw data from the Ludlum 2360 instrument. Please revise the Report to include the raw data files.

11. **Apparent Typos/Minor Editorial Comments:**

**- Section 4.4.3 and 4.5, Calculation of Surface Activity and Instrument for Measurement of Smear Samples, Page 4-5:** The definition of 'B' for the formula for calculating surface activity appears to be erroneous as 'B' is defined as the background efficiency rather than background count rate.
**- Section 4.4.1, Instrument Efficiency, Page 4-3:** The formula listed in this section indicates the background count rate is denoted by '$R_S$'. Since '$R_{S+B}$' is stated to represent the gross rate (sample plus background) perhaps the background count rate should be defined as '$R_B$.'
**- Section 5.1.2, Meetings, Page 5-1 and Section 5.2, Mobilization and Site Preparation, Page 5-2:** Section 5.1.2 states that a pre-construction and mutual understanding meeting was held on July 24, 2018; Section 5.2 indicates mobilization and data collection activities

started in August 2019. Please confirm or, if needed, correct these dates.
- **Table 5**. There is a footnote "a" included in the "matrix" entry for the 2221/44-20. Is this a typo?
- **Table 12, Sample Summary Statistics:** It would be helpful to readers if the table specified the measurement units and uncertainty associated with the results.
- **Appendix D, Reference Background Area Data:** It would be helpful to readers if the tables indicated where the data were collected.
- **Appendix H, page H-7:** The appendix refers to five radiological soil samples collected October 2, 2019 through October 24, 2020. Should the reference be to concrete, not soil? Also, the latter date appears to give the wrong year.